

2016: Where is the IT Workforce Headed?

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Over the years the global workforce has adapted and evolved to suit the various needs of the market and in turn the society. So, the big question is where are we headed? What does the future have in store for us? I begin by quoting Ray Kurzweil “By the time we get to the 2040s, we’ll be able to multiply human intelligence a billion-fold. That will be a profound change that’s singular in nature. Computers are going to keep getting smaller and smaller. Ultimately, they will go inside our bodies and brains and make us healthier, make us smarter.”

Needless to say, technology has taken center stage and would continue to do so, the point is how fast we would be at picking up the latest trends and implementing them successfully. The Global IT market is assumed to have crossed \$ 3.8 trillion in 2016. Statistics on Business Confidence Index for the IT industry showed an elevated figure through most of this year with very slight fluctuations. This goes on to affirm the fact that there is a continuous need for IT professionals, thereby contributing to positive IT labor growth.



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The entire IT workforce can be broadly classified into two major elements –

- Employment in the IT sector
- IT occupations that span across various industry sectors

Employment in the Information Technology sector

They include core technical positions – software developers, support experts, network specialists, testing and QA experts etc. They also consist of non-technical professionals like the HR, sales, and marketing, finance, etc. which are an integral part of the proper functioning of an IT company.

IT occupations in various industry sectors

Typically, these companies employ technical professionals for positions like software development, technical support – software and hardware, network engineer, etc. These companies could be from across various industry verticals such as banking and financing, manufacturing, FMCG, healthcare, etc. Besides these technical occupations, there is a set of technology intense positions as well.

Technology trends that shape IT services

Technology trends play a major role in job creation and job destruction and IT being a dynamic field, requires the workforce to remain updated and future ready. The current trendsetters are:

Cloud computing

Cloud computing is a major driving force of the IT economy with cloud bandwidth and computing power already being commoditized. The cloud has directly and indirectly given rise to various other trends such as real-time analytics, improvement in security models, industries have revamped their software and hardware requirements to improve returns, etc. This trend has transformed technology strategies as well as IT operations. IT services today focus on providing clients with greater flexibility, security, and accessibility empowering businesses spread across various geographies through cloud technology. The speculation about security issues with regards to cloud computing has also been addressed thereby encouraging even government agencies to adopt a cloud-first approach.

The IT workforce today is well equipped to provide cloud services such as migration to cloud, Infrastructure as a Service (wherein data centers are managed to provide vital information to a global workforce.), Platform as a Service (legacy platforms empowered with a cloud-first approach), Software as a Service for better flexibility and scalability of hosting services.



Enterprise Mobility Solution to empower employees and businesses with critical information across various devices.

Analytics and Big Data

Data analytics and the benefit of data-based decisions have become popular, leading businesses to restructure their activities. It is clearly evident that data-driven decisions give businesses the competitive advantage that separates them from their peers.

The present day IT services, focus on helping businesses adopt data management practices, provide latest tools for data storage and analytics. Again, data abstraction supported by cloud services have been able to deliver critical analytical solutions that directly impact the business. IT workforce has to be fortified with the latest data management services that give useful insights on business, function, and service of the particular organization. IT services focus on providing end-to-end data solutions that emphasize on a comprehensive approach. Internet of Things.

A recent survey by Business Insider shows that there would be over 34 billion devices connected to the internet by 2020. Also a whopping \$6 trillion is expected to be spent on IoT solutions over the next 5 years. Businesses and governments are expected to invest heavily in this sector and the IT industry should arm itself to cater to this huge demand for connecting devices to fulfill various LoB requirements.

The IT workforce would have to gear-up to create smart systems that can communicate with each other to accomplish a goal. They would have to cater to IoT services directed at customers, businesses, security applications, device management and analysis, processors, operating systems, etc.

Multi-stack/ full stack developers

Complex business requirements give way to a need for comprehensive services that provide the end-user with a future proof and well-rounded solution. IT Companies prefer to hire experts who can transfer their skills back and forth as they are expected to have a good understanding of a full stack. Ideally, the various layers of a full stack would be –

- Server, hosting and network services
- Data modeling • Business logic
- API / MVC
- User Interface
- User Experience
- A good understanding of client and business requirements



A full stack developer is expected to have a fair idea of these layers, thereby making it easier to collaborate and work on a project in a successful manner.

Resource Management and Workflow

Besides the various technology trends that have shaped the needs of the IT workforce, there have also been significant changes in the way they operate. Resource management trends show the following;

Permanent Workforce and Temporary/Independent workforce

As the technology landscape keeps changing the global workforce is expected to reshape itself. Since businesses prepare for long-term goals, there is a huge need for technological skills. In Jill Goldstein's (HR lead, Accenture) words – It is going to be increasingly challenging to hire these specialized individuals as most of them prefer to work independently, on a third-party basis. She goes on to say that the future workforce would constitute of a large percentage of non-salaried employees who are highly skilled. And very often this workforce has an expertise in new technology trends that grant organizations the competitive edge they require to stay ahead of the game.

As a result, companies now transfer the responsibilities of the temporary worker from procurement to HR. This is a huge change from how things used to be. The interests of these highly skilled talented workers are safeguarded to ensure a continued relationship that is mutually beneficial.

Boomerang employees gain acceptance

Boomerang employees are those that leave the company to return at a later point in time. Though there are some companies that have a policy against hiring boomerang employees, there are a greater number of companies who prefer them over fresh candidates. The reason being that these employees are well adjusted to the culture and require minimal training to resume work; but come with a fresh perspective. This trend can be attributed to the fact that professionals switch jobs more often there is improved access to talent through technology. In fact, several organizations actively maintain networking groups like Facebook and LinkedIn to stay connected with former employees.

Horizontal movement vs Vertical movement

Another major change is the perception of promotion. These days, employees prefer taking up horizontal transfers. This works out to be beneficial for both the employee and the company. From a company perspective, it improves productivity and communication as such employees would have a good understanding of how the various departments function and hence are



better at getting things done. From an employee's point of view, it definitely enhances the resume and eventually prepares the candidate for a successful vertical movement.

The ever-changing markets and constantly evolving technology landscape have been instrumental in bringing about all of these changes in the way we work and conduct our businesses. As Kurzweil puts it we can expect to see mammoth changes in technology and the way it impacts our life in the coming years.

About the Author:

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